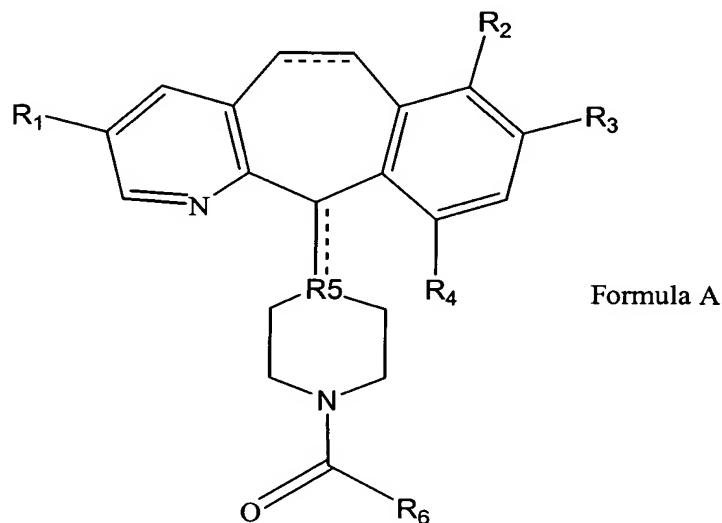


**WE CLAIM:**

1. A method for treating or preventing a disorder of calcium homeostasis in a subject comprising administering, to the subject, a compound according to the following formula:



5

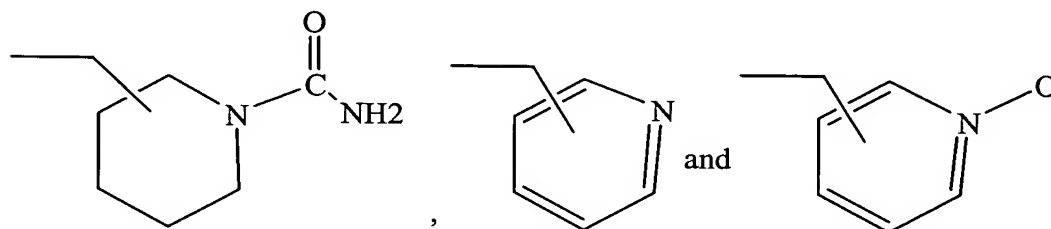
wherein R1 can be hydrogen or halogen

R2, R3 and R4 are independently selected from H and halogen provided that at least one of R2, R3 and R4 is H;

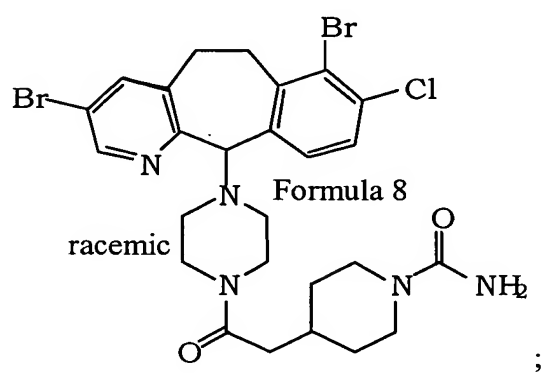
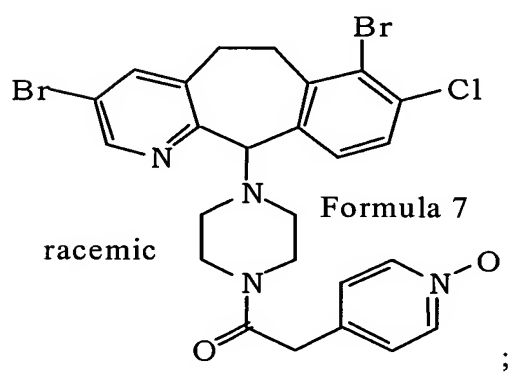
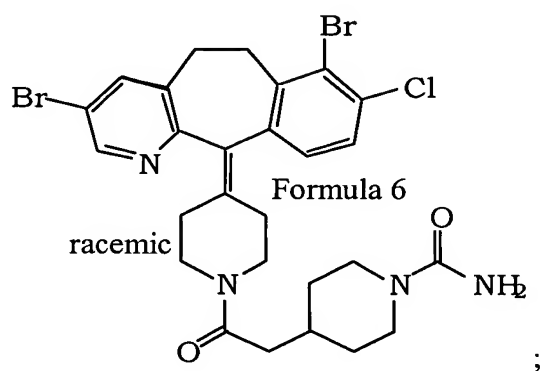
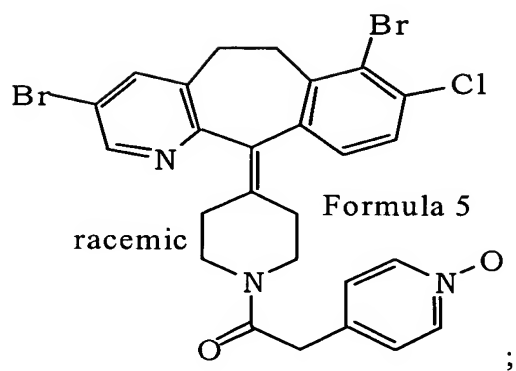
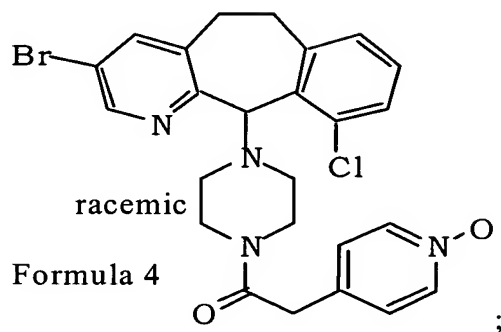
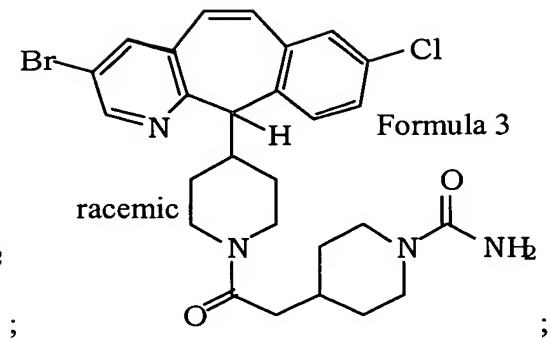
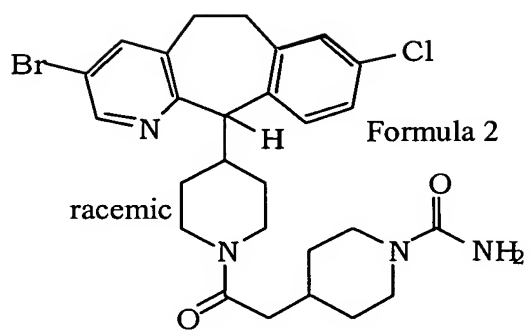
----- represents an optional bond;

- 10 R5 represents C when the optional bond to R5 is present and represents CH or N when the optional bond to R5 is absent; and

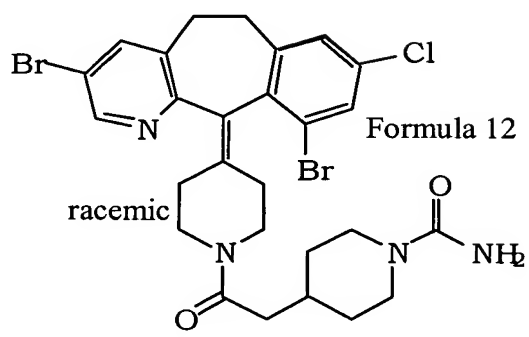
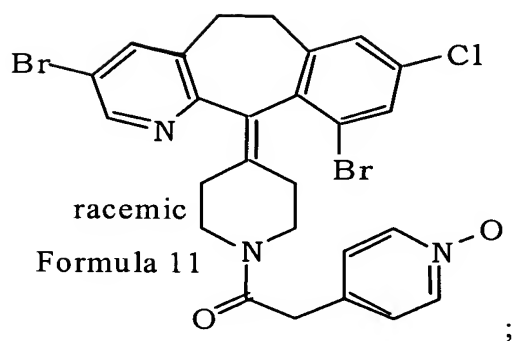
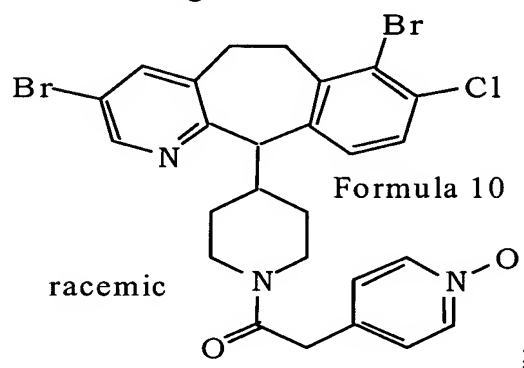
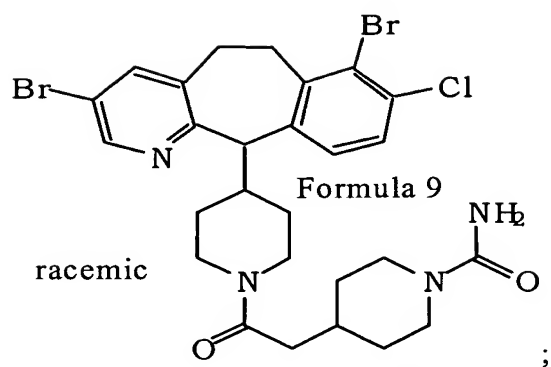
R6 is selected from

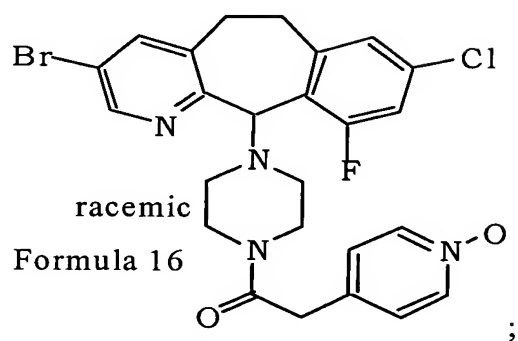
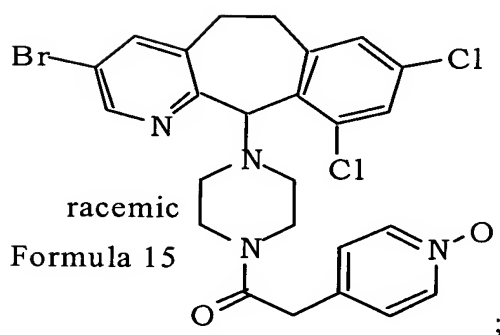
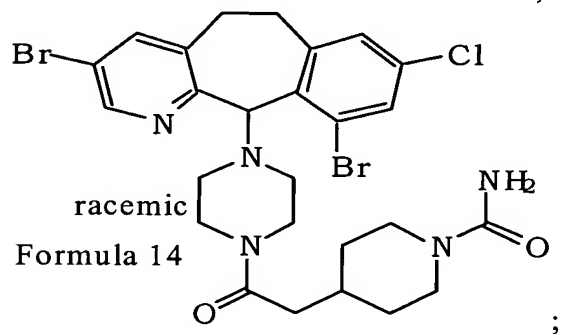
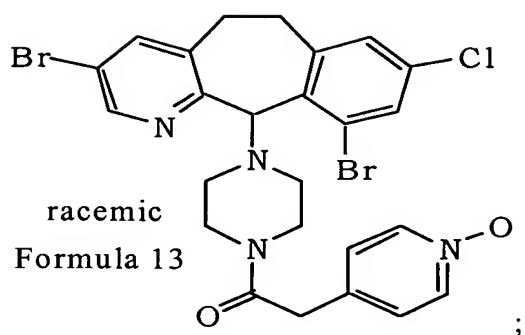


- 15 2. The method of claim 1 wherein the compound of Formula A comprises a formula selected from the group consisting of:

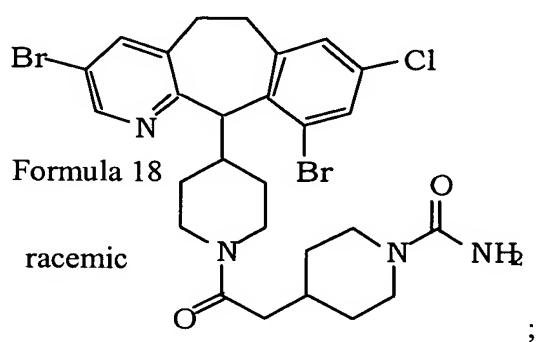
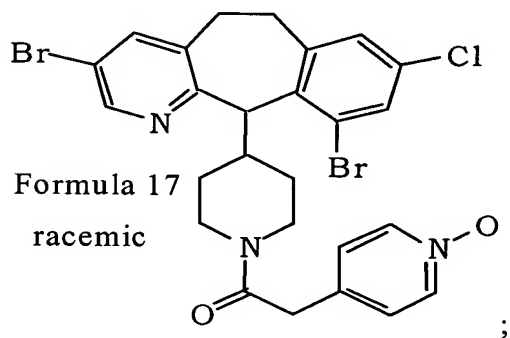


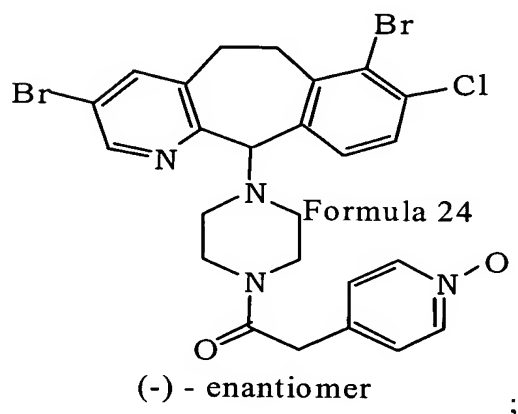
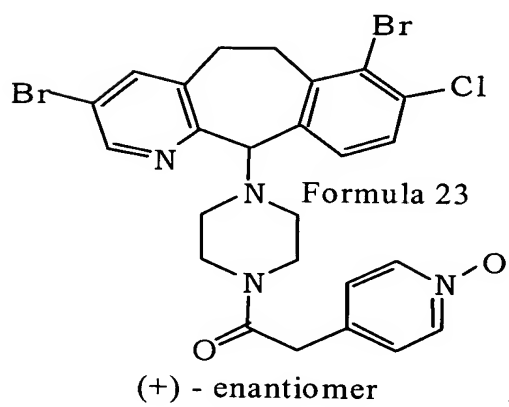
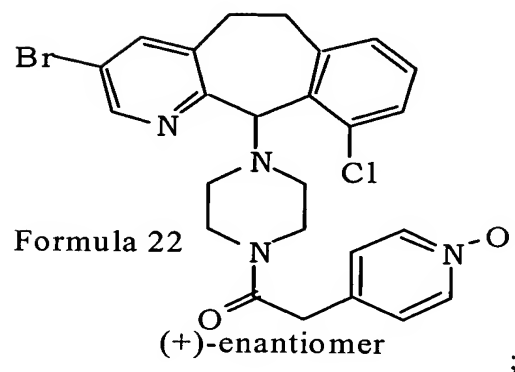
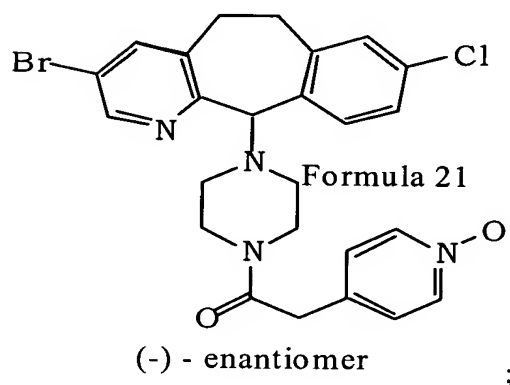
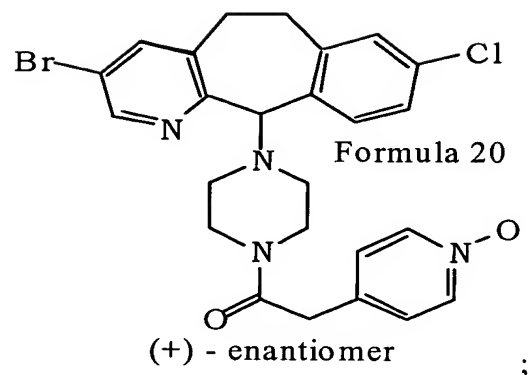
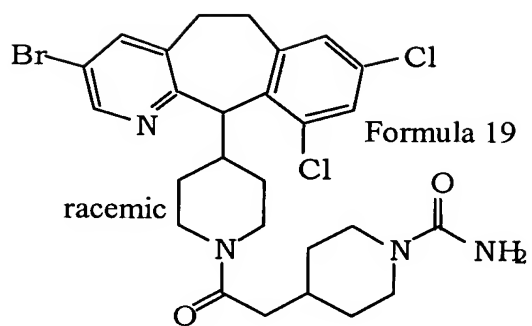
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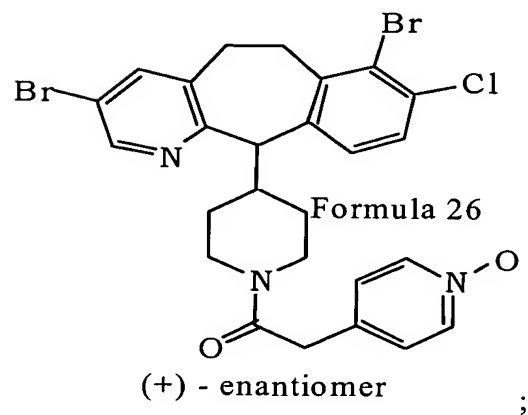
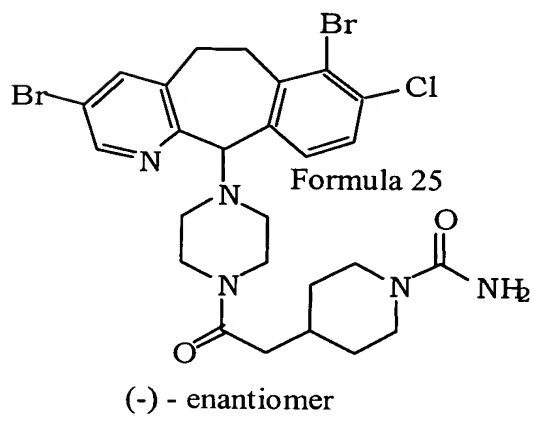


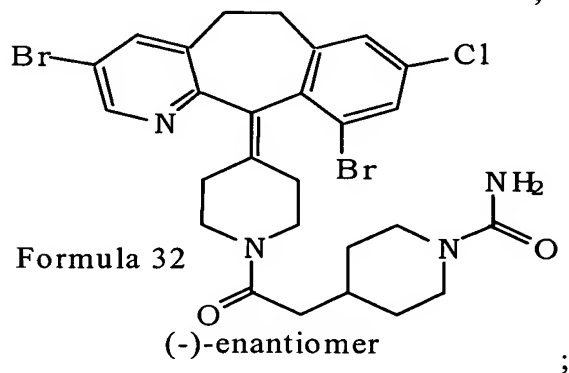
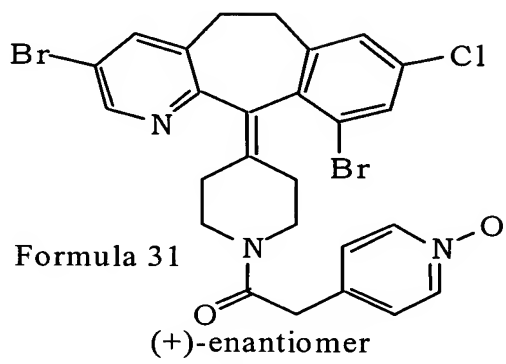
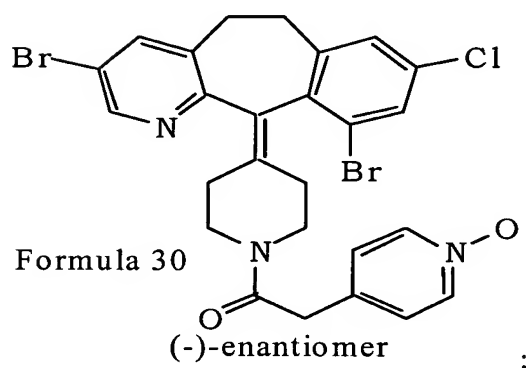
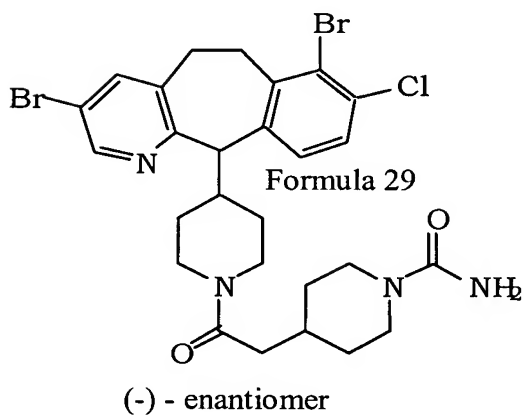
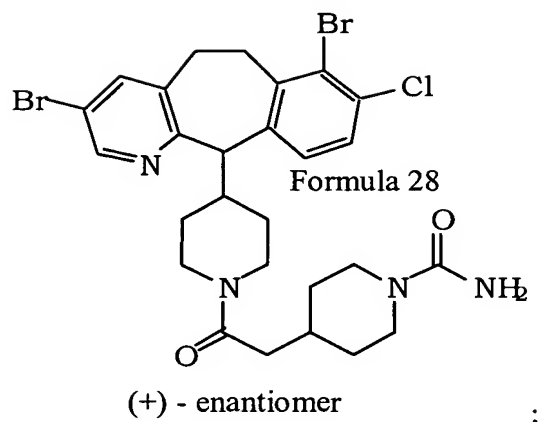
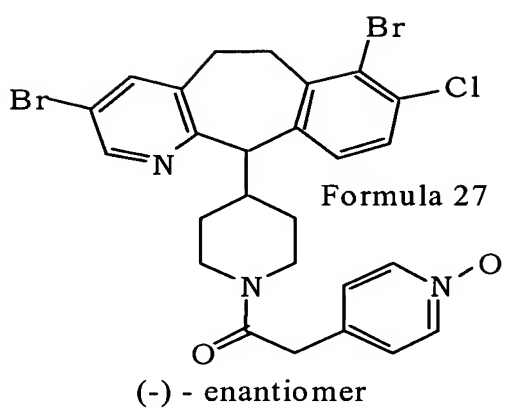
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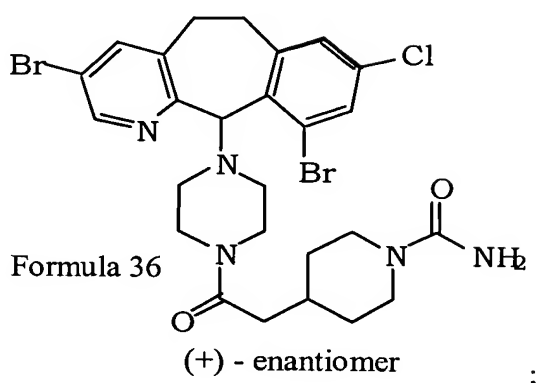
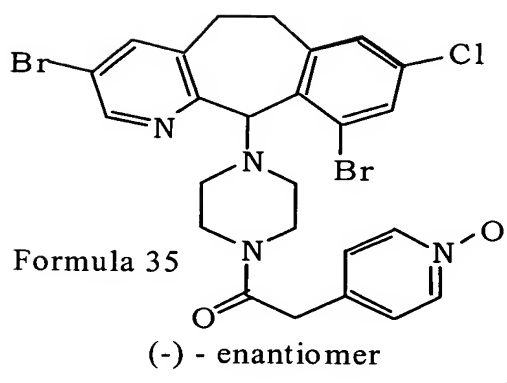
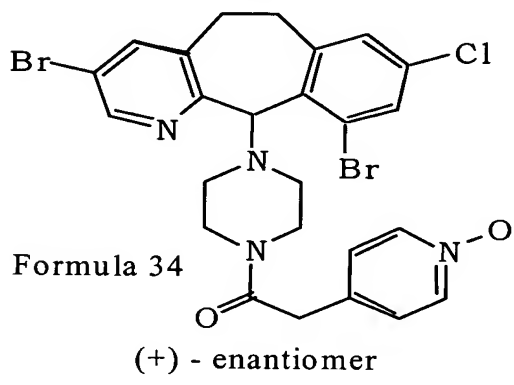
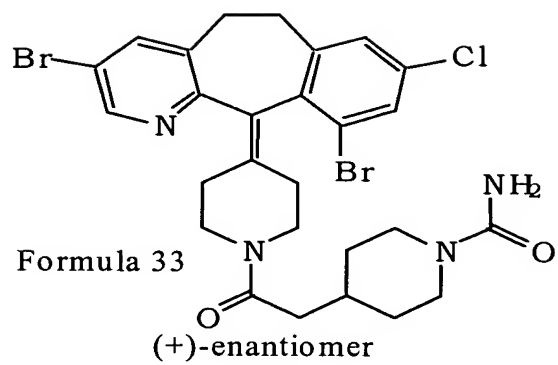




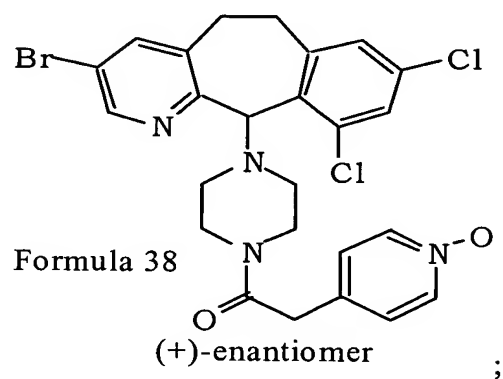
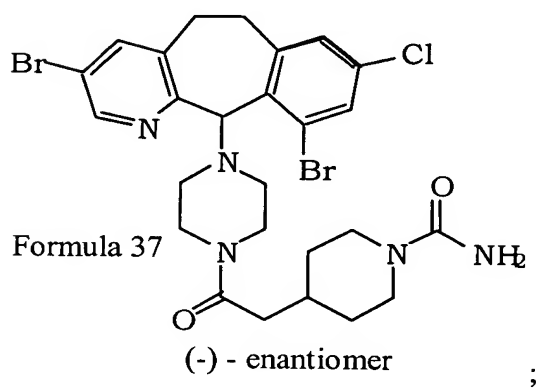
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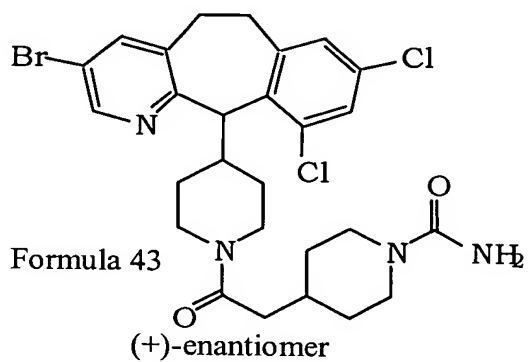
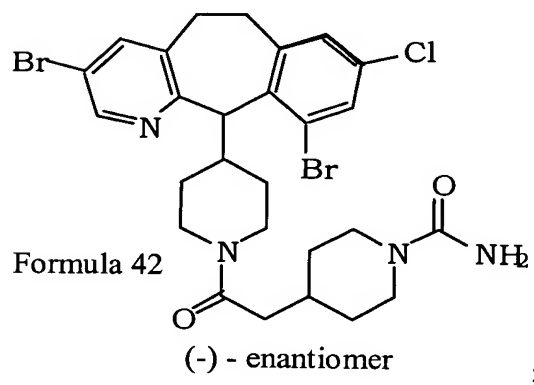
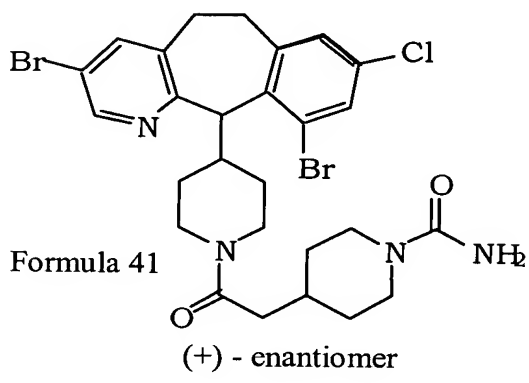
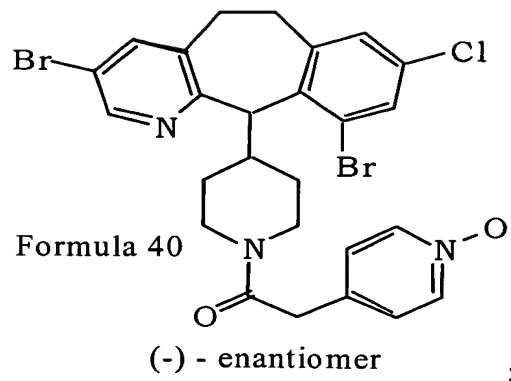
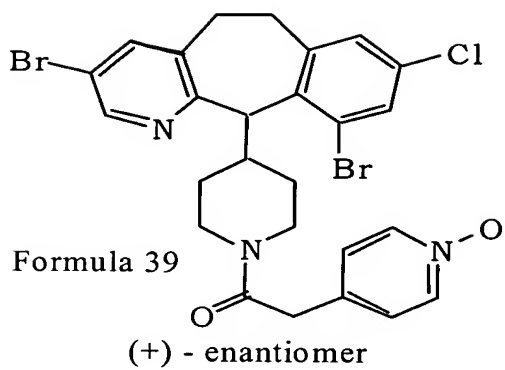




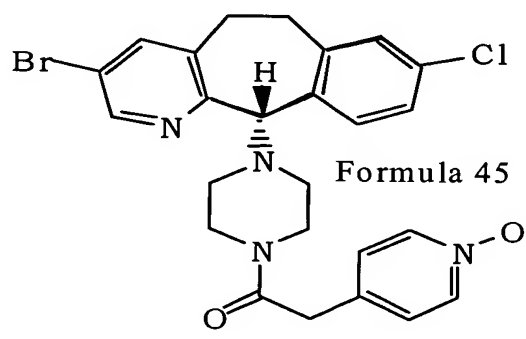
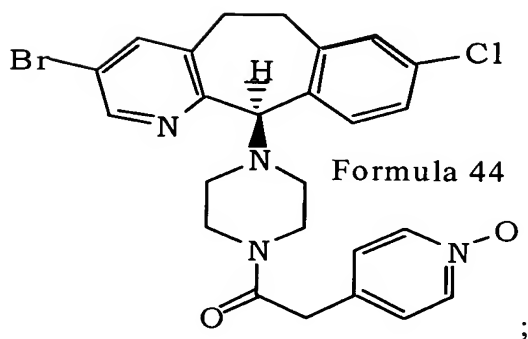


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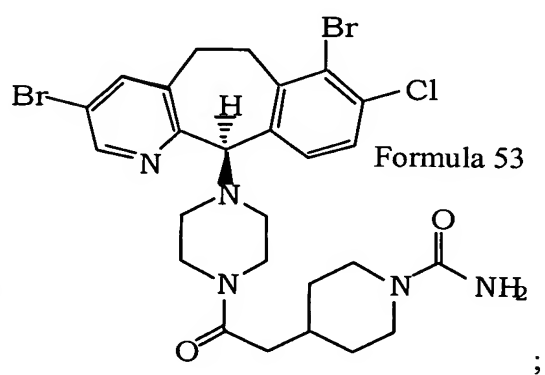
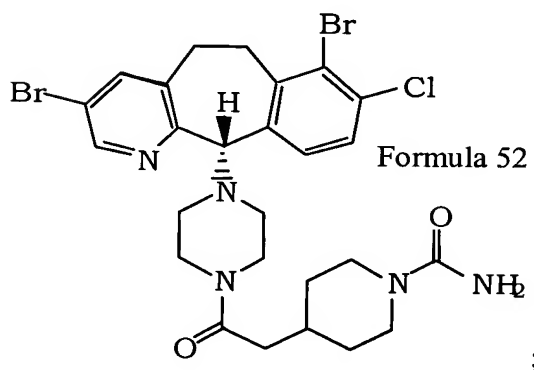
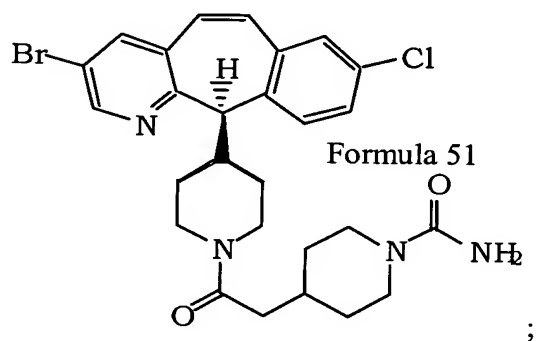
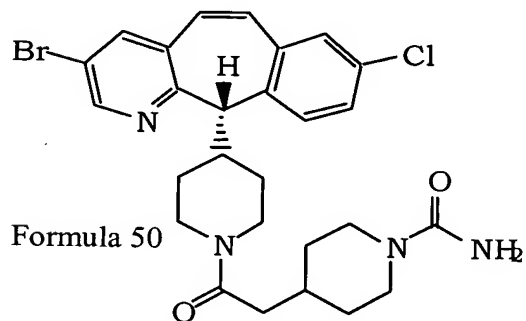
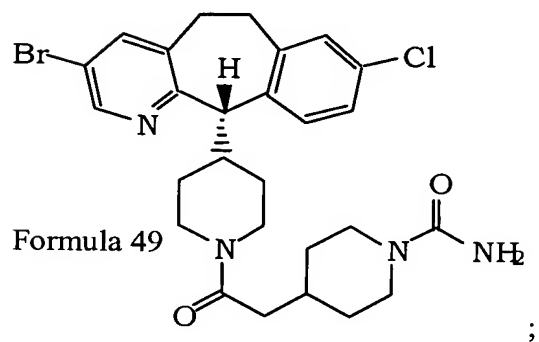
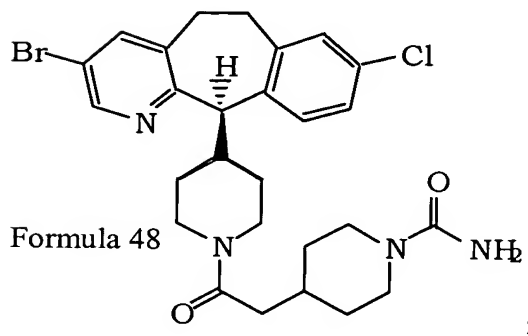
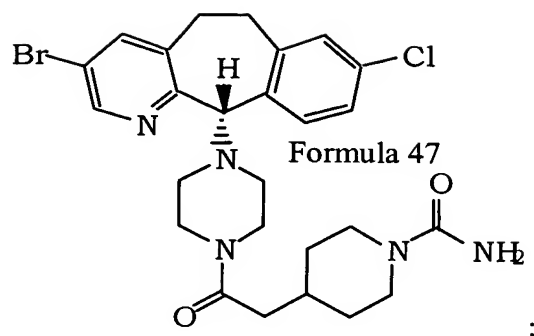
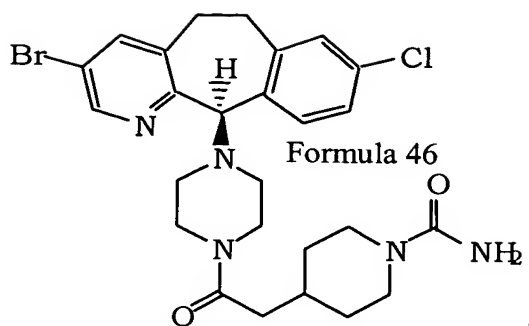


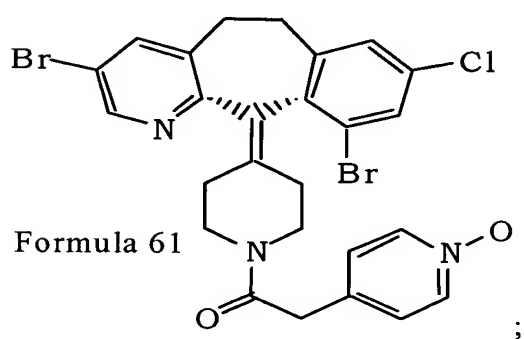
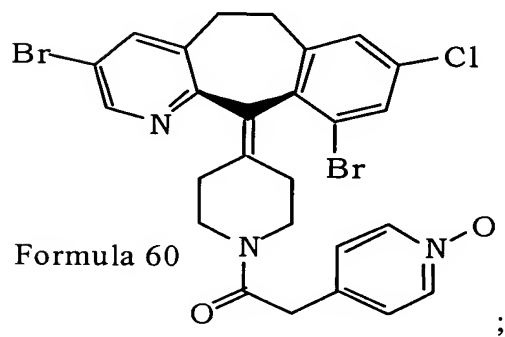
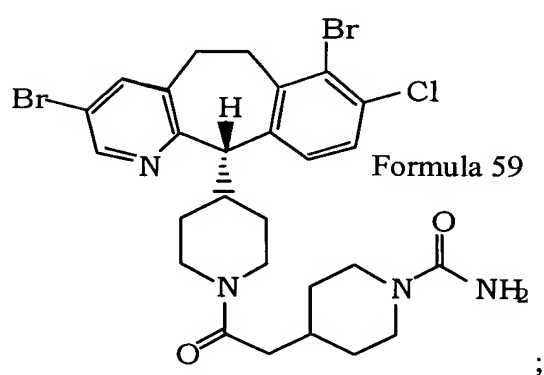
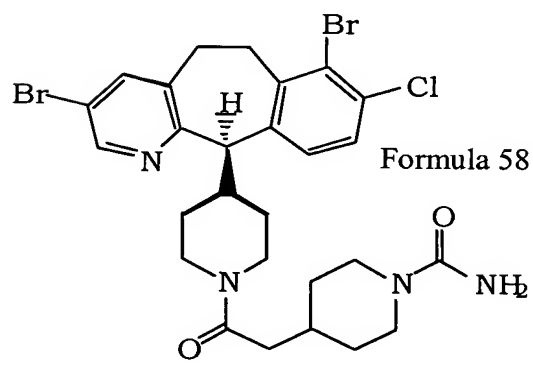
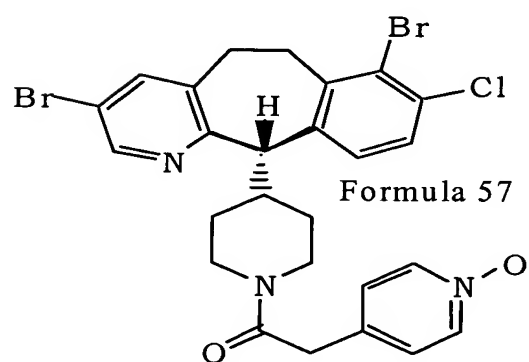
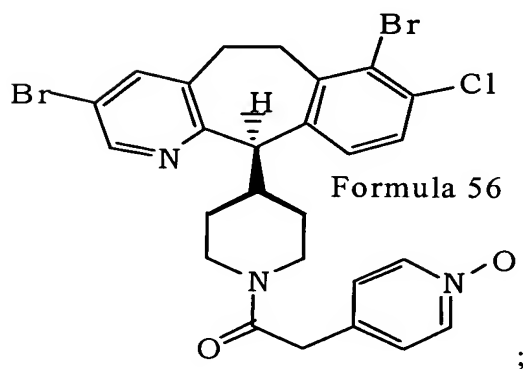
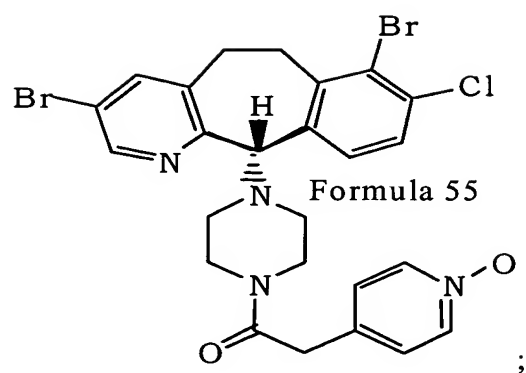
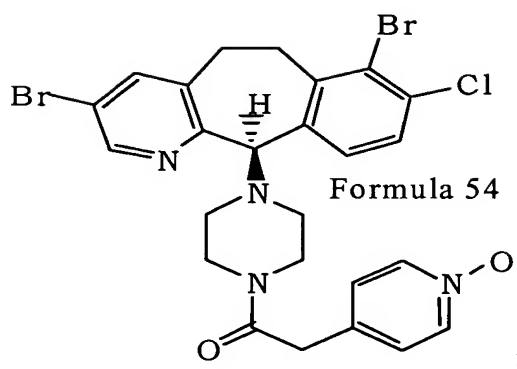


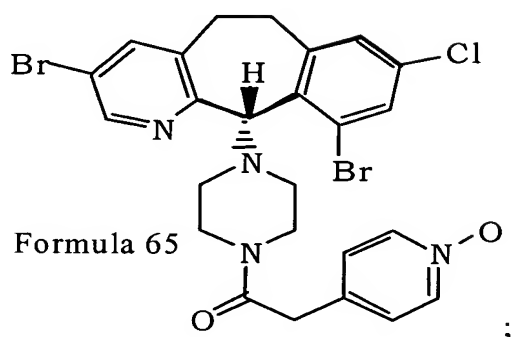
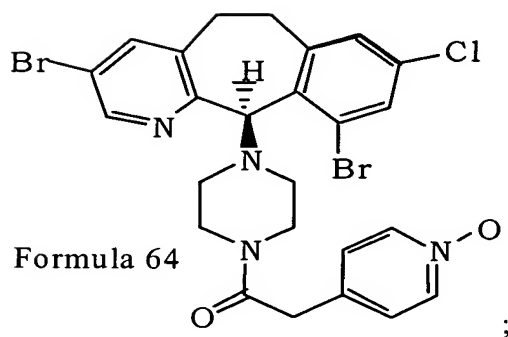
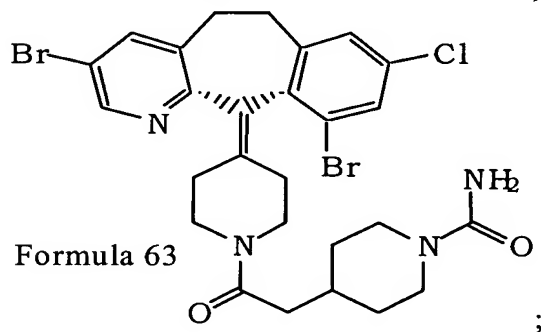
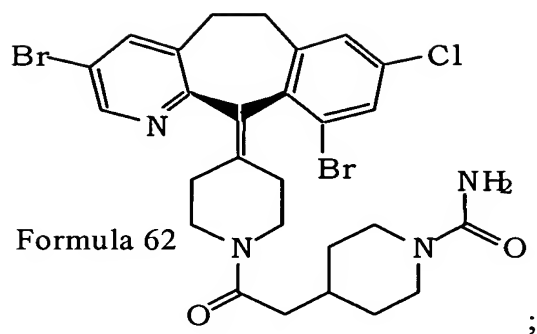
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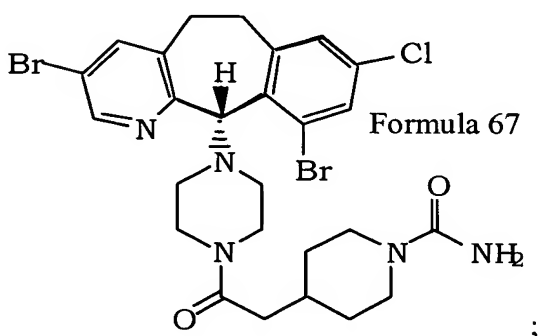
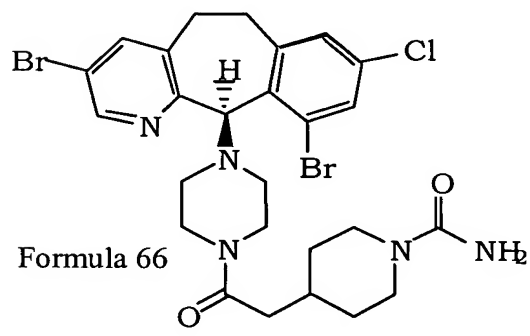


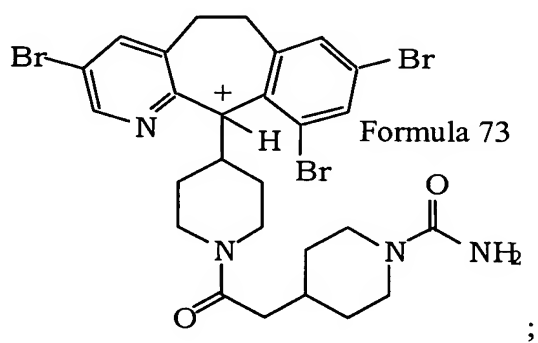
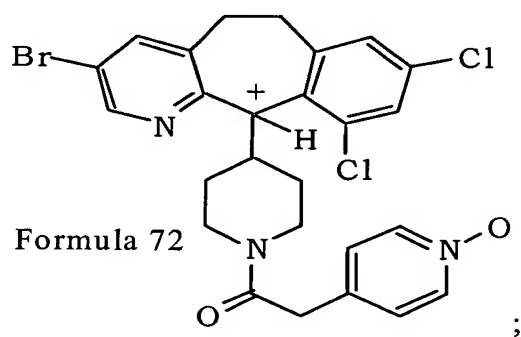
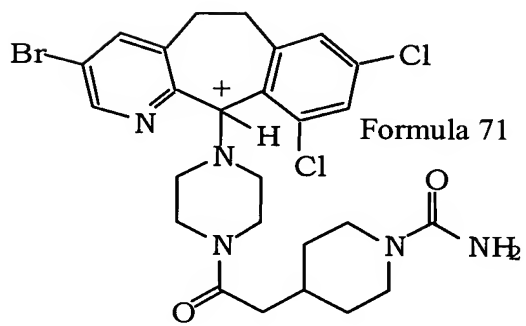
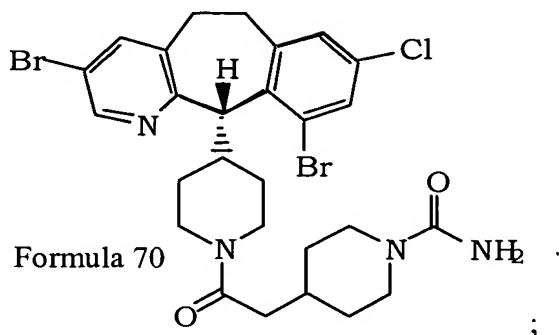
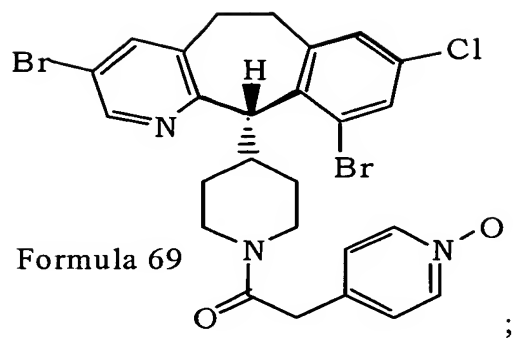
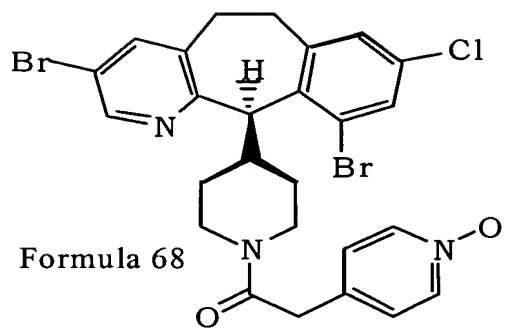


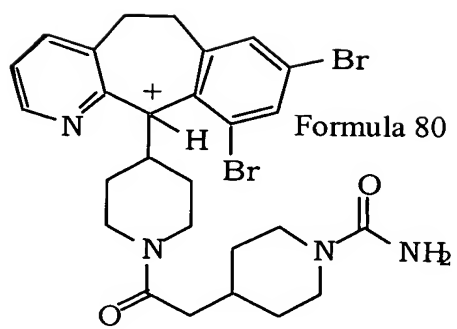
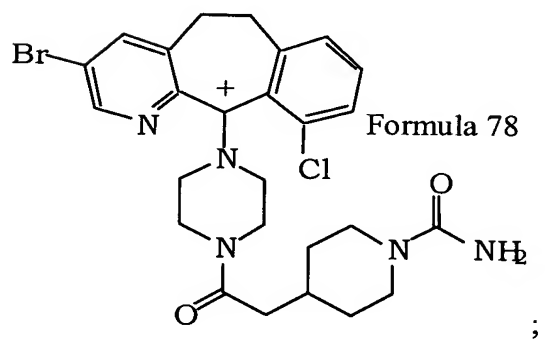
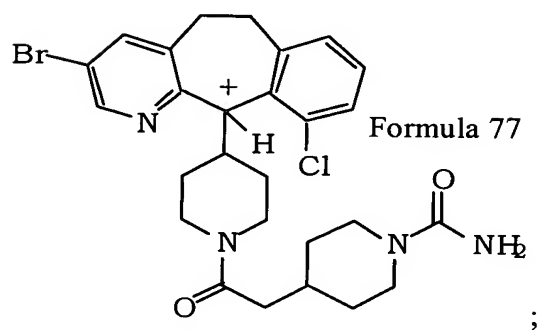
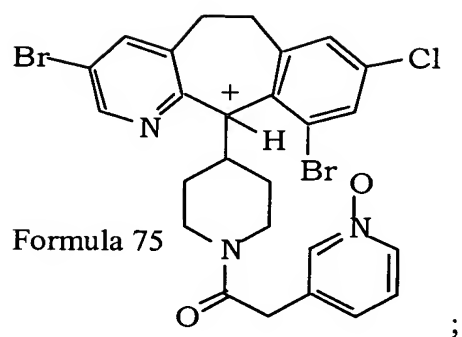




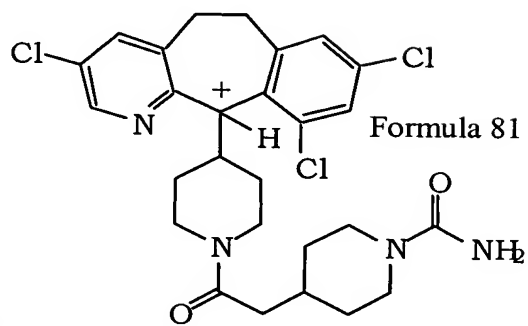
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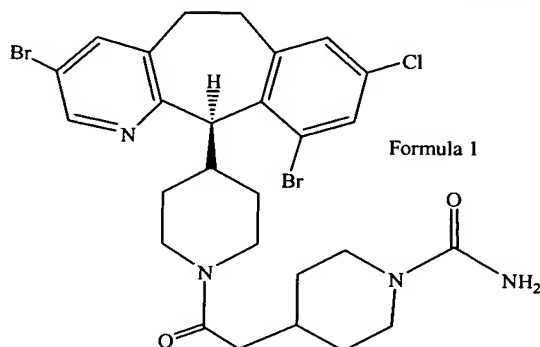


; and



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3. A method for treating or preventing a disorder of calcium homeostasis in a subject comprising administering, to the subject, a compound according to the following formula:



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4. The method of claim 1 wherein the medical condition is selected from familial benign hypocalciuric hypercalcemia, neonatal severe primary hyperparathyroidism, renal  
15 secondary hyperparathyroidism and osteoporosis.

5. The method of claim 1 wherein the disorder is mediated by a low level of Calcium Ion Sensing Receptor activity or expression or by excess serum parathyroid hormone.

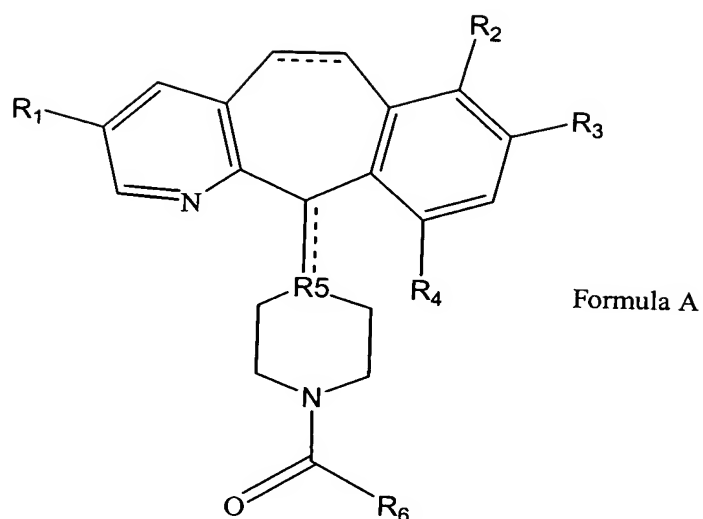
20 6. The method of claim 1 wherein the subject is a human, a dog or a cat.

7. The method of claim 1 wherein the compound is administered in combination with a pharmaceutically acceptable carrier in a pharmaceutical composition.

25 8. The method of claim 7 wherein the pharmaceutical composition is in the form of a pill, tablet or capsule.

9. The method of claim 1 wherein the compound of Formula A is administered in association with a second compound for treating a disorder of calcium homeostasis.

10. The method of claim 9 wherein the second compound is selected from AMG073, NPS467, NPS568, gadolinium, lanthanum, neomycin,  $Mg^{2+}$ , 1,25-dihydroxyvitamin D, calcitrol, paricalcitol, doxercalciferol, zoledronic acid, calcitonin, alfacalcidol and oxacalcitriol.
11. The method of claim 9 wherein the second compound is administered in combination with a pharmaceutically acceptable carrier in a pharmaceutical composition.
12. The method of claim 11 wherein said compound of Formula A and said second compound are administered in combination with a pharmaceutically acceptable carrier in a single pharmaceutical composition.
13. The method of claim 11 wherein said compound of Formula A and said second compound are administered in combination with pharmaceutically acceptable carriers in two separate pharmaceutical compositions.
14. The method of claim 13 wherein said compound of Formula A and said second compound are administered simultaneously.
15. The method of claim 13 wherein said compound of Formula A and said second compound are administered non-simultaneously.
16. The method of claim 11 wherein the pharmaceutical composition is in the form of a pill, tablet or capsule.
17. A method for decreasing the level of  $Ca^{2+}$ , parathyroid hormone or parathyroid hormone related protein in the serum of a subject comprising administering a compound according to the following formula to the subject:



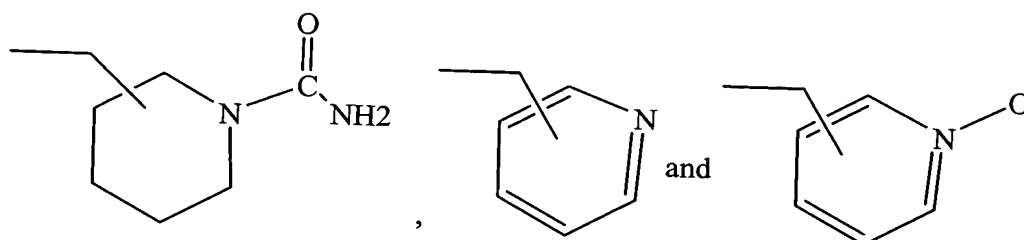
wherein R1 can be hydrogen or halogen

R2, R3 and R4 are independently selected from H and halogen provided that at least one of R2, R3 and R4 is H;

5 ----- represents an optional bond;

R5 represents C when the optional bond to R5 is present and represents CH or N when the optional bond to R5 is absent; and

R6 is selected from

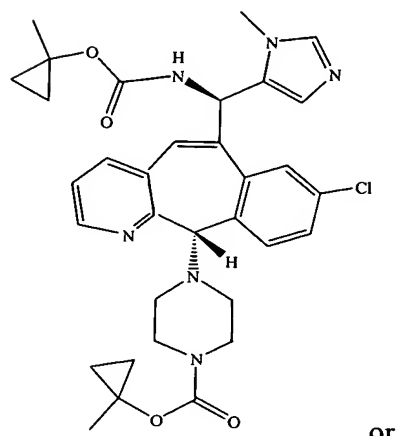


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18. A method for treating or preventing a disorder of calcium homeostasis in a subject comprising administering, to the subject, a compound according to the following formula:



OR

